



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,207	01/22/2004	Masaya Oi	2018-835	2348
23117 7590 07/17/2007 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER VU, TUAN A	
			ART UNIT 2193	PAPER NUMBER
			MAIL DATE 07/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/761,207	Applicant(s) OI ET AL.	
	Examiner Tuan A. Vu	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 4/23/07.

As indicated in Applicant's response, claims 1, 4, and 8-14 have been amended, and claims 15-48 added. Claims 1-48 are pending in the office action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claims 1, 8, 9, 10, 11, 12, 13, 14 recite (see preamble) 'covering a family of a plurality of variations'; and there is no such teaching from scanning the Specifications. One skill in the art would construe 'family of a plurality of variations' in that the 'variations' contain characteristics pertinent to a given family; and a coverage of a family as so-recited has to at least be disclosed in terms of how characteristics of a family, or how 'variations' thereof --in its plurality-- are determined so to be pertinent to a 'family' to be covered by a model. The Specifications is silent as to the term 'family'; and it is deemed that the Applicants have introduced new matter; or has no possession of this 'covering a family of a plurality of variations' by the time the invention was reduced to practice. This lack of disclosure will be

Art Unit: 2193

treated as though the 'covering' is for 'variations' OR plurality thereof. The above limitation has to be removed or amended.

Dependent claims 2-7 fail to remedy to the above deficiency, and 15-48 for reciting the 'family' also fail to remedy to the lack of description as set forth above; hence all are also rejected.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 8, 9, 10, 11, 12, 13, 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. The terms "unnecessary" and 'necessary' recited in the phrase '...certain model covering a necessary variation ... and not covering an unnecessary variation...' entail the connotation of necessity (i.e. 'necessary' versus what is not, 'unnecessary') hence a limitation that amounts to a relative term which renders the claim indefinite. For example, in claim 1, the term "necessary" is not defined by the claim, while the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention (i.e. necessary with respect to what criteria). For one skill in the art, there is no way to assess how indispensable or necessary a *part* is, such that a *certain* model ('certain' representing another form of indefiniteness) should keep a variation of a part and how unimportant that variation thereof should be removed, out of some necessity. The basis upon which the invention teaches determining what is 'necessary' (from what is not) is not disclosed; and thus not enabling how this *certain* model is effectively implemented in the sense of only

Art Unit: 2193

keeping the ‘necessary’ items. The Disclosure fails to show one single teaching as to how this keeping and selecting is done so to put forth the degree of *necessity* related to the ‘variation’ being worked on. The *metes and bounds* of such ‘covering’ limitation (i.e. keeping and removing parts of the model driven by this ‘unnecessary’ concept) is deemed not enabled by the Specifications. The limitation about this *certain model covering* will be treated as broad as interpretation of the remaining part of the claim would allow.

The remaining dependent claims 2-7 and 15-48 fail to remedy to the above deficiency, and are likewise rejected for not providing definite and distinct teaching to enable the use of the recited subject matter.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-5, 7-16, 19, 23, 27, 31, 35, 39, 43, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Herbert Hanselmann, ‘Automotive Control: From Concept to Experiment to Product’, IEEE *International Symposium on Computer-Aided Control System Design*, Proceedings of September 1996; pp. 129-134(hereinafter Hanselmann).

As per claim 1, Hanselmann discloses a code generation apparatus to generate a source code using a given model covering a family of a plurality of variations, the apparatus comprising:

model acquisition means for acquiring the given model (e.g. Step 1, Step 2, pg. 129, R col.; Fig. 4-5 – Note: model inherently reads on integrating therein of requirements such as automotive/regulation-based parts names, variables, attributes, or parametric data) having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations; (e.g. *Automotive control ... city-driving ... fuel efficiency... Regulations ... requirements ... Total Development Environment* – L column, pg. 129; Step 6, pg. 129; Fig. 4-5 – Note: requirements gathering to set up initial model and create Simulink blocks --with parameters -- therefrom reads on model specified by part specifier);

selection information acquisition means for acquiring selection information capable of indicating at least one of selection and deletion of a certain specific part (e.g. step 3-4; R col. pg. 129; Fig. 2, pg. 130) using the part specifier specifying the certain part (Note: Simulink drag-and-drop of simulator parameters in conjunction with initial model specification reads on selection/deletion using part specifier) ; and

deletion and generation means for generating the source code from a certain model (e.g. step 5, R col., pg. 129; Fig. 1, pg. 130; *step 2 and 3 may be repeated many times* – pg. 130, bottom L col.; bottom L, pg. 132 to top pg. 132, R column – Note: improving via readjusting of blocks in *Simulink* tool reads on reaching a more certain model than the initial or preliminary model – see step 6-8, pg. 129-130; backward arrows in Fig. 1), which is generated using the given model acquired by the model acquisition means based on the selection information acquired (e.g. Step 1, Step 2, pg. 129, R col.; Fig. 4-5) by the selection information acquisition means, the certain model covering a necessary variation selected from the plurality of variations

Art Unit: 2193

and not covering an unnecessary variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and a machine readable storage medium for the storing the generated source code (e.g. Fig. 7, pg. 133).

As per claim 2, Hanselmann discloses wherein at least one part specifier includes a part specification block (e.g. Fig. 4-5 in light of step 1, step 2, step 4-6, pg. 129, L col.) which encloses the specific part of the given model (e.g. *Toyota* – section 3, The **Virtual ECU**, pg. 131 – Note: Simulink-based to address verification of requirements of parameters for Toyota’s ECU reads on part including a given model), and wherein the selection information acquisition means acquires the selection information indicating at least one of selection and deletion of the specific part using the part specification block (e.g. step 5, R col., pg. 129; Fig. 1, pg. 130; *step 2 and 3 may be repeated many times* – pg. 130, bottom L col. – Note: improving via readjusting of blocks in *Simulink* tool reads on selection/deletion to improve upon initial or preliminary model – see step 6-8, pg. 129-130; backward arrows in Fig. 1).

As per claim 3, Hanselmann discloses wherein at least one part specifier includes attribute information (e.g. parameters – Fig. 1; Fig. 2, 4, 5) that is included in the specific part of the given model.

As per claim 4, Hanselmann discloses:

correlative information acquisition means for acquiring correlative information indicating correlation (e.g. section 3, **RCP requirements, Virtual ECU**, pg. 130-131; Fig. 5; *Real-Time Interface, dSPACE hardware* – Fig. 1, pg. 130) between part specifiers respectively

Art Unit: 2193

specifying the specific parts of the given model acquired by the model acquisition means and the selection information acquired by the selection information acquisition means (e.g. Fig. 3-5 – Note: prototyping or performing real-time Hw/Sw mapping based on requirements and hardware limitations and implementation constraints reads on correlating parts specifications and SIMULINK data blocks setting), wherein the deletion and generation means generates the source code (section 4, pg. 132) from the certain model that is generated using the given model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means and the correlative information acquired by the correlative information acquisition means (steps 5-7, pg. 130-131; *Parameters Tuning*, section 5, pg. 132-133).

As per claims 5, 7, Hanselmann discloses information about a model type (*Toyota ECU commercial microcontroller* – section 3, The **Virtual ECU**, pg. 131; *DEC Alpha AXP, TMS320C40* -section 6, pg. 133 – Note: Simulink-based to address verification of requirements of parameters for Toyota's ECU reads on part including a given model) relevant to the source code generated by the deletion and generation means (refer to claim 4); wherein the selection information includes information about an intended use (section 7, pg. 133; section 8, pg. 134 – Note: modeling and implementing test/prototyping using SIMULINK for a code simulating a ECU for Toyota or Chrysler reads on requirements to fulfill via test for ECU application) relevant to the source code generated by the deletion and generation means.

As per claim 8, Hanselmann discloses a computer program product on a computer readable medium for use in a code generation apparatus to generate a source code using a given

Art Unit: 2193

model covering a family of a plurality of variations, the computer program product comprising instructions for:

acquiring the given model (. Step 1, Step 2, pg. 129, R col.; Fig. 4-5) having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations; (e.g. *Automotive control ... city-driving ... fuel efficiency... Regulations ... requirements ... Total Development Environment* – L column, pg. 129; Step 6, pg. 129; Fig. 4-5);

acquiring selection information capable of indicating at least one of selection and deletion (e.g. step 3-4; R col. pg. 129; Fig. 2, pg. 130)of a certain specific part of the plurality of specific parts using the part specifier specifying the certain specific part; and

generating the source code (e.g. bottom L, pg. 132 to top pg. 132, R column) from a certain model, which is generated using the acquired given model (e.g. step 5, R col., pg. 129; Fig. 1, pg. 130) based on the acquired selection information, the certain model covering a necessary variation selected from the plurality of variations and not covering an unnecessary variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

storing the generated source code in a machine readable medium.

As per claim 9, Hanselmann discloses simulation apparatus (e.g. Fig. 4) for executing functions included in a certain model generated using a given model covering a family of a plurality of variations, the apparatus comprising:

model acquisition means for acquiring the given model having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;;

selection information acquisition means for acquiring selection information capable of indicating at least one of selection and deletion of the specific part using the part specifier; and

deletion and generation means for executing (see *execution* - bottom L, pg. 132 to top pg. 132, R column; steps 5, 6 pg. 129) the functions included in the certain model that is generated using the given model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means; , the certain model covering a necessary variation selected from the plurality of variations and not covering an unnecessary variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

a machine readable medium for storing the generated certain model;

all of which limitations having been addressed in claim 1 or 8.

As per claim 10, Hanselmann discloses a computer program product on a computer readable medium for use in a simulation apparatus for executing functions (bottom L, pg. 132 to top pg. 132, R column; steps 5, 6 pg. 129) included in a certain model generated using a given model covering a family of a plurality of variations, the computer program product comprising instructions for:

acquiring the given model having a plurality of specific parts, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;;

acquiring selection information capable of indicating at least one of selection and deletion of the specific part using the part specifier; and

executing the functions included in the certain model that is generated using the acquired given model based on the acquired selection information; , the certain model covering a necessary variation selected from the plurality of variations and not covering an unnecessary variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily);

all of which limitations having been addressed in claim 1 or 9.

As per claim 11, Hanselmann discloses a model generation apparatus to generate a certain model using a given model covering a family of a plurality of variations, comprising:

model acquisition means (for acquiring the given model ... specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;;)

selection information acquisition means (for acquiring selection information ... selection and deletion ... using the part specifier); and

deletion and generation means for (generating the certain model ...acquired by the ... based on the ... selection information acquisition means), the certain model covering a necessary variation selected from the plurality of variations and not covering an unnecessary variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a

certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

a machine readable medium for storing the generated certain model;

all of which having been addressed in claim 1.

As per claim 12, Hanselmann discloses a computer program product on a computer readable medium for use in a model generation apparatus to generate a certain model using a given model, the computer program product comprising instructions for:

acquiring (the given model ... by a part specifier, each specific part corresponding to at least one variation among the plurality of variations;); acquiring (selection information ... selection and deletion ... using the part specifier); and generating the certain model ...using the acquired given model ... selection information , the certain model covering a necessary variation selected from the plurality of variations and not covering an unnecessary variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily);

of which limitations having been addressed in claim 1.

As per claim 13, refer to the computer product of claim 8.

As per claim 14, Hanselmann discloses code generation apparatus to generate a source code using a given model covering a family of a plurality of variations, comprising: model acquisition means for acquiring the given model heaving a plurality of specific parts, wherein each of the plurality of parts included in the given model is specified by each of a plurality of part specifiers, each specific part corresponding to at least one variation among the plurality of

variations; (Fig. 2, 4, 5 – Note: GUI with file/toobar/clipboard for part/attributes specifying via panels for a SIMULINK or dSPACE instances build reads on plurality of files, clipboard, or panel or part specifier- opened for a given project, each being part of a plurality of part specifiers, the validation of which being recorded as lookup tables – see pg. 134, top);

selection information acquisition means for acquiring selection information indicating at least one of selection and deletion of a given specific part using a given part specifier that specifies the given specific part (refer to claim 1); and

deletion and generation means for generating the source code from a certain model that is generated using the given model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means, the certain model covering a necessary variation selected from the plurality of variations and not covering an unnecessary variation (Note: tool enabling selective enlisting of modeling blocks or constructs reads on reaching a certain model with selecting of only variations of modeling constructs at the expense of not keeping non-chosen constructs unnecessarily); and

a machine readable medium for storing the generated source code (refer to claim 1).

As per claims 15, 16, and 19, based on the model and the industrial applicability of Simulink (e.g. automobile industry via Fig. 1, 2, pg. 129-130; Introduction, pg. 129; Fig. 4-5, pg. 131-132), Hanselmann does disclose wherein the variations are functions exclusive to each other in the generated certain model; wherein the variations of the family are types different from each other; wherein the variations are intended uses which are different from each other (Note: a Simulink model when implemented in a industrial application inherently include specific intended use per model-- like ECU for each car model, applying to different type of industrial

Art Unit: 2193

applications, wherein each application being modeled and implemented comprise functions exclusive to the model made for the a build or prototyping).

As per claims 23, 27, 31, 35, 39, 43 and 47, refer to claim 19.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 6, 17-18, 20-22, 24-26, 28-30, 32-34, 36-38, 40-42, 44-46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert Hanselmann, 'Automotive Control: From Concept to Experiment to Product', and further in view of Admitted Prior Art (see BACKGROUND of invention, pg. 2-3- hereinafter APA).

As per claim 6, Hanselmann does not explicitly disclose that the selection information includes information about a destination country relevant to the source code generated by the deletion and generation means. However, the automotive concept for building specific controller in compliance with the requirements or regulations of a environment or geographical settings targeted for the car is strongly suggested (see section: Introduction, pg. 129; section 7-8, pg. 133-134). Geographical requirements such as destination country where the automobile is to be delivered is further mentioned in APA (see Specifications: pg. 2; top para pg. 3) according to which Simulink (such as taught by Hanselmann) can support modeling and testing of manufactured engine destined for Japan, US or Europe. Based on the above teaching implied by the regulations considered in car making in regard to a geographical location target, it would

Art Unit: 2193

have been obvious for one of ordinary skill in the art at the time the invention was made to implement the requirements by Hanselmann so that selection information includes information about a destination country in association with the code generating based on Hanselmann's Total Development Environment tool because this knowledge of the target country would dictate the regulations information specific to the code needed to implement appropriate automobile functionality in that respect and successfully select and validate the parameters implicated by the requirements for such country (see APA) based upon the above automotive regulations.

As per claims 17-18, 20, Hanselmann does not explicitly disclose wherein the variations of the family are types of engines; but based on the rationale as set forth for addressing the *intended use* and *specific type* using Hanselman's automotive application in addressing claims 16, 19 from above in light of APA, the above limitations would also have been obvious because each country for which Hanselmann's car model is intended for would have regulations or domestic laws specific for such country and a targeted car model for that country has to be modeled compliant to a given engine type to suit that country's environment and laws, as set forth in claim 6.

As per claims 21, 22, 24, refer to rationale as set forth in claims 17-18, 20.

As per claims 25, 26, 28, refer to claims 17-18, 20.

As per claims 29, 30, 32, refer to claims 17-18, 20.

As per claims 33, 34, 36, refer to claims 17-18, 20

As per claims 37, 38, 40, refer to claims 17-18, 20.

As per claims 41, 42, 44, refer to claims 17-18, 20.

As per claims 45, 46, 48, refer to claims 17-18, 20.

Response to Arguments

11. Applicant's arguments filed 4/23/07 have been fully considered but they are not persuasive. Following are the Examiner's observation in regard thereto.

35 USC § 102, 103 Rejection:

(A) Applicants have submitted that, as discussed in the Specifications, variations having common factors such as engine types are 'family' and based on a chart, the model acquisition means leads to obtaining a certain model covering necessary variation from the plurality of variations and not covering unnecessary variation. There is lack of teachings from the claim and from the Disclosure as to what 'family of plurality of variations' is all about; and this has been analyzed in the USC § 112 rejection, 1st paragraph (Appl. Rmrks pg. 16-17). The term 'family' for being not once mentioned throughout the Specifications cannot effectively support the Applicant's clarification via providing a chart and proffering V6 and V8 engines, for the recited 'certain model' in light of 'variations' and 'part specifier' will not suffice to enforce a context involving 'type of engines'; nor can the argument about 'having common factors' (Appl. Rmrks pg. 16, bottom) elevate this unclaimed 'common factors' to becoming 'family of ... variations' of the claim language. The 'family' limitation is deemed insufficiently enabled from the claim and the Specifications, and will bear very little patentable weight (emphasis added) as set forth in the § 112, 1st Rejection. Further, there is no definiteness about the recited 'certain model' to establish how this 'certain' model achieves what is recited as 'covering a necessary variation ... not covering an unnecessary variation'. The language of the claim is broad in the use of 'certain', and stand-alone 'variation': the claim is short in specifying what 'certain' is, which specific industrial entity or domain this 'variation' belongs to. In addition to that, the *relative*

term indefiniteness issue in using ‘necessary’ and ‘unnecessary’ as set forth in the § 112, 2nd para rejection (emphasis added), is rendering the claim even more indefinite because of insufficiently enabling material. Based on broad interpretation, it is deemed that Hanselmann has fulfilled the claimed limitations. Hanselmann teaches a GUI tool to model constructs to put forth a functional model pertinent to a automobile industry application, each constructs therein represented by iconic or graphical elements, each of which specified by an identifier to put forth the architectural or functional aspect of said application; i.e. hence model with specifier for each automobile part represented by the atomic model icons; with the very act of modeling being equivalent to selecting (parts or variations of) model elements that are to be needed for the intended model; that is, fulfilling the ‘covering’ limitation as discussed above. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

(B) Applicants have submitted that Hanselmann’s tool with drag-and-drop is not capable of ‘selecting a variation from a plurality of variations by itself’ (Appl. Rmrks pg. 17, bottom) and that Hanselmann’s portions about automotive control does not teach or suggest selection procedures to select type or variations of types (Appl. Rmrks pg. 18). Based on the broad and rather unspecific nature of terms used in the claim – e.g. variations, certain model, part, covering necessary variation-- the claim cannot preclude the teachings by Hanselmann whereby a tool enables the developer to select items purporting a automotive application in order to provide a specific model based on which parts are defined and destined for prototyping, testing and industrially developed. This lack of definiteness or support from the Specifications has been set

Art Unit: 2193

forth in the 35 USC § 112 rejection, and based upon which it is deemed that the rejection using Hanselmann's modeling tool has met the claim. The argument, in light of what has been observed in section A above, is deemed non-persuasive.

In all, the claims will stand rejected as set forth in the Office Action.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before

Art Unit: 2193

using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan A Vu
Patent Examiner,
Art Unit 2193
July 12, 2007